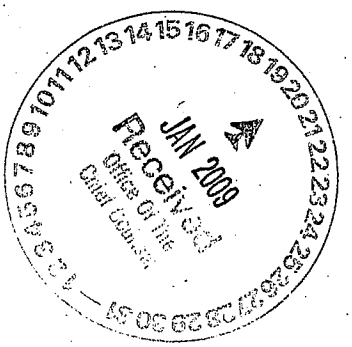
COOPER, WHITE & COOPER LLP
BARRY R. OGILBY (SBN 118133)
MARK R. WARNKE (SBN 148140)
1333 N. California Blvd., Ste 450
Walnut Creek, California 94596
Telephone: (925) 935-0700
Facsimile: (925) 256-9428

Attorneys for Petitioner PACIFIC MERCHANT SHIPPING ASSOCIATION



BEFORE THE CALIFORNIA

STATE WATER RESOURCES CONTROL BOARD

In the Matter of the Petition for Reconsideration/Review by PACIFIC MERCHANT SHIPPING ASSOCIATION of the State Water Resources Control Board's Order for Clean Water Act Section 401 Water Quality Certification for the EPA's Vessel General Permit	MATTER NO. **PETITION FOR RECONSIDERATION / REVIEW; REQUEST FOR STAY**

INTRODUCTION

Pursuant to 23 California Code of Regulations section 3867, Petitioner PACIFIC MERCHANT SHIPPING ASSOCIATION ("PMSA"), an independent, not-for-profit shipping association, acting on behalf of its member companies, hereby petitions the State Water Resources Control Board ("State Water Board") for reconsideration of conditions and requirements contained in the Order for Clean Water Act Section 401 Water Quality Certification (the "401 Certification") issued by the State Water Board's Executive Director on December 17, 2008, with respect to the EPA's recently-finalized National Pollutant Discharge Elimination System ("NPDES") General Permit for Discharges Incidental to the Normal Operation of Vessels ("Vessel General Permit").

By way of background, shortly after passage of the Clean Water Act in 1972, the EPA promulgated regulations which excluded from NPDES permitting requirements discharges incidental to normal vessel operations. In 2003, roughly 31 years later, a legal challenge was brought to the vessel discharge exclusion in the U.S. District Court for the Northern District of

California. In March 2005, the District Court ruled that the exclusion exceeded the EPA's permitting authority under the Clean Water Act. In a second decision issued in September 2006, the District Court ordered the vessel discharge exclusion vacated as of September 30, 2008. The EPA filed an appeal of the District Court's order with the U.S. Court of Appeals for the Ninth Circuit. While the appeal was pending, the EPA also began to develop the Vessel General Permit in the event that discharges incidental to normal vessel operations were ultimately found to be subject to NPDES permitting requirements. In July 2008, the Ninth Circuit issued a ruling upholding the District Court's decision. The District Court subsequently granted an extension of its original vacatur order to December 19, 2008, providing the EPA with additional time to finalize the Vessel General Permit.

In conjunction with the proposed issuance of federal permits which may result in discharges into State waters, the EPA or other permit applicant is required under Section 401 of the Clean Water Act, 33 U.S.C. § 1341, to apply to the affected States for a certification that the permits meet all applicable water quality standards and other requirements under both federal and State law. As part of the certification process, a State can identify additional limitations and monitoring requirements deemed necessary to achieve such standards. These supplemental requirements are then added as new conditions upon adoption of the federal permits and apply to discharges into that State's waters. 33 U.S.C. § 1341(d); 40 C.F.R. § 124.53.

On June 27, 2008, the EPA formally applied to the State Water Board for issuance of a certification under Section 401 of the Clean Water Act with respect to the proposed Vessel General Permit. The State Water Board issued its 401 Certification on December 17, 2008. In order to meet the EPA's time schedule for issuance of the Vessel General Permit, the State Water Board completed in under 6 months a process that normally could have taken well in excess of 1 year. On December 18, 2008, the EPA issued the final Vessel General Permit, which included additional requirements identified by the State Water Board as conditions of certification. The District Court also postponed the vacatur of the vessel discharge exclusion from December 19, 2008 to February 6, 2009, in large part to provide owners and operators of regulated categories of vessels with time to become familiar with obligations under the Vessel General Permit.

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& COOPER LLP
ATTORNEYS AT LAW
1333 N. CALIFORNIA BLVD.
WALNUT CREEK, CA 94596

As will be set forth in this Petition for Reconsideration/Review, certain conditions and requirements contained in the 401 Certification greatly expand obligations under the Vessel General Permit imposed on those categories of regulated vessels operating in California waters – in large part through the State Water Board's rejection of the approach adopted by the EPA primarily relying on best management practices ("BMPs") in favor of the establishment of numerical effluent limitations for well over 100 chemical, biological, toxicity and physical constituents, and extensive sampling, monitoring and/or reporting requirements covering up to 26 separate categories of vessel discharges.

Challenges to conditions included in a federal NPDES permit pursuant to a State Water Quality Certification are required to be brought through the administrative and judicial procedures provided under the laws of that State. 40 C.F.R. § 124.55(e). Accordingly, the instant Petition for Reconsideration/Review is being filed with the State Water Board to seek re-evaluation and potential deletion, revision, or clarification of certain conditions contained in the 401 Certification. During the course of the Board's re-evaluation, PMSA requests that the effective date of these conditions be stayed due to the substantial harm that would be suffered by PMSA members and their affected vessel owners and operators. With more than 42% of all containerized imports into the United States coming through California ports, potential impacts could also be felt throughout a broad section of the economy if a stay is not granted. Activities necessary to ensure compliance with these conditions simply cannot be completed by February 6, 2009, especially given the fact that none of the categories of regulated vessels operating in California waters has ever previously been subject to NPDES permitting requirements for discharges incident to normal operations.

I. NAME, ADDRESS, AND TELEPHONE NUMBER OF PETITIONER

Pacific Merchant Shipping Association
250 Montgomery Street, Suite 700
San Francisco, CA 94104
Attention: John Berge
Telephone: (415) 352-0710
E-Mail Address: JBerge@pmsaship.com

II. SPECIFIC ACTION WHICH THE STATE WATER BOARD IS REQUESTED TO RECONSIDER

PMSA is hereby petitioning the State Water Board to reconsider certain conditions and applicable Attachments 1 through 7 contained in the 401 Certification, a copy of which is attached hereto as Exhibit A. The specific conditions on which PMSA seeks reconsideration (referred to collectively as the "Disputed Conditions") are provided below in their entirety.

Additional Condition 5. If the ballast water receives chlorination treatment, the discharge must not exceed a maximum level of 8 micrograms per liter of total residual chlorine.

Additional Condition 7. Vessel discharges must comply with all statewide and regional water quality control plans (Basin Plans). Attachment 4 lists the narrative water quality objectives that must be met in the receiving water. Attachment 5 lists the numeric effluent limitations that must be met in the effluent discharged into the receiving water depending on the type of water body into which the discharge occurs.

Additional Condition 10. Dye tabs shall be placed in graywater systems when ships are in port.

Additional Condition 12. Detergents must not be used to disperse hydrocarbon sheens in any waste streams. To ensure the practice is implemented for all state waters, and additionally to protect drinking water sources in the Sacramento and San Joaquin Delta, methylene blue active substances (MBAs) should not exceed 0.5 mg/L in all water bodies.

Additional Condition 13. Effluent monitoring must be performed on all waste streams discharged into State waters to determine waste stream quantity and quality. In the case of discharges that do not lend themselves to effluent sampling, such an antifouling hull coating leachate (Discharge #4), cathodic protection (Discharge #7), and sonar dome (Discharge #23), reporting according to Attachment 6, Additional Monitoring and Reporting Requirements, will suffice. For effluent that results from in-water maintenance near or below the waterline, such as propeller hydraulic fluid (Discharge #9), rudder bearing lubrication (Discharge #19), and stern tube discharge (Discharge #24), receiving water sampling and analysis must be performed according to Attachment 6.

Additional Condition 14. In addition to the other monitoring requirements, the volume of each discharge into State waters must be measured or estimated, and the constituents in Attachment 5 must be monitored according to the table in Attachment 6 when any discharge into State waters occurs. For discharges to enclosed bays, estuaries, and freshwater streams (defined in Attachment 5), except for polynuclear aromatic hydrocarbons (PAHs) and solvents (benzene, toluene, ethylbenzene, and xylene), the vessel owner or operator may submit to USEPA and the State Water Board a certification stating that the discharge does not contain specific volatile and semi-volatile organic constituents in lieu of monitoring for those constituents. For samples collected when a discharge occurs while a vessel is underway in State waters, the sample may be held until the vessel arrives at its next port at which time the sample shall be analyzed and the appropriate reports

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submitted to USEPA and the State Water Board or SLC as shown in Additional Condition 16 below. When in a California port or ocean terminal, samples must be analyzed by, or sent for analysis to, a certified laboratory as soon as possible.

Additional Condition 15. When the manifest for vessel cargo indicates the presence of any hazardous substances as set forth in Title 22, Chapter 11, Appendix X of the California Code of Regulations, the discharges must also be monitored for those specific substances (see Attachment 2).

Additional Condition 16. All monitoring and reporting information shall be submitted to USEPA. Vessels entering the State of California shall also submit reports using the following forms:

- **7.1 – State Water Board Discharge Type Reporting Form**
- **7.2 – State Water Board Constituent Type Reporting Form**
  Submit annually or whenever a report is submitted to USEPA.

  Attention: NPDES Unit
  Division of Water Quality
  State Water Resources Control Board
  1001 "I" Street, 15th Floor
  Sacramento, CA 95814
- **7.3 – SLC Marine Invasive Species Program Hull Husbandry Reporting Form**
  Submit annually within 60 days of receiving a written or electronic request from the California State Lands Commission.
- **7.4 – SLC Ballast Water Reporting Form**
  Upon departure from each port or place in California waters.

  California State Lands Commission
  Marine Facilities Division
  200 Oceangate, Suite 900
  Long Beach, CA 90802

III. DATE ON WHICH THE CERTIFICATION ACTION OCCURRED

The 401 Certification was issued by the Executive Director of the State Water Board on December 17, 2008.

IV. STATEMENT OF REASONS WHY THE ACTION WAS INAPPROPRIATE OR IMPROPER

From the time the Clean Water Act was enacted until now, vessels were not covered by the requirements of the Act but subject to regulatory exemption. Due to the litigation noted above, EPA and the states have been engaged in an extremely hurried process to establish a permit process regulating tens of thousands of mobile sources – vessels engaged in interstate and foreign commerce that have never had such a regime applied to them. In order to enable the EPA to meet

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1333 N. CALIFORNIA BLVD.
WALNUT CREEK, CA 94596

its deadline for issuance of the Vessel General Permit, the State Water Board completed its 401 Certification on an extremely compressed schedule. By virtue of the very unusual manner in which these newly-imposed regulatory standards were adopted, and the lack of opportunity for comprehensive review, technical evaluation and public hearings and comments, the resulting 401 Certification leaves PMSA members and other affected vessel owners and operators with an NPDES Vessel General Permit that in many instances cannot be complied with by February 6, 2009 – the date when the permit requirements become effective. The imposition of extensive new regulatory standards and conditions requires a fully informed understanding of the need, feasibility and consequences of their application. The Disputed Conditions were not fully and adequately evaluated at the time of adoption and should be reconsidered in a thorough, thoughtful and fully informed manner. The Disputed Conditions are not present in any other state's certification of the NPDES Vessel General Permit and create a unique and substantial hardship applicable to vessels that are engaged in interstate and foreign commerce and spend a small percentage of their operational time in California waters.

V. THE MANNER IN WHICH PETITIONER'S MEMBERS ARE AGGRIEVED

Petitioner's members and the ocean shipping community will suffer substantial harm if they are required to immediately comply with the Disputed Conditions. Among other things, there is no precedent within the shipping industry for the imposition of numerical effluent limitations on such a broad range of routine vessel discharges, or for the performance of the sampling, testing and reporting required by the State Water Board. Moreover, even if some of the requirements ultimately prove feasible, it will be impossible to accomplish the necessary tasks to implement such an expansive regulatory program prior to February 6, 2009. Therefore, all affected vessel owners/operators would necessarily be vulnerable to being out of compliance with provisions in the Vessel General Permit while operating in California waters. Impacts could also be felt throughout the public and private sectors in California and United States, which rely upon oceangoing vessels for approximately 42% of containerized imported goods.

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1333 N. CALIFORNIA BLVD.
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VI. SPECIFIC ACTION THAT PETITIONER REQUESTS BE TAKEN BY THE STATE WATER BOARD

Petitioner specifically requests that the State Water Board review and reconsider the propriety, costs, and feasibility of vessel owner/operator compliance with the Disputed Conditions. In this regard, Petitioner requests that the State Water Board authorize a study to evaluate whether each sampling and testing requirement in the original certification is beneficial, necessary and feasible when applied in the context of oceangoing vessel mobile sources. As part of that study, Petitioner requests that the Board conduct an evaluation to determine which constituents for which numerical effluent limitations are proposed by the State Water Board in fact have a reasonable potential to cause exceedances of applicable water quality standards with respect to the particular discharges in questions.

VII. LIST OF PERSONS (IF ANY) OTHER THAN PETITIONER, ITS MEMBERS, AND APPLICANT KNOWN TO HAVE AN INTEREST IN THE SUBJECT MATTER OF THE PETITION

In accordance with 23 California Code of Regulations section 3858, on August 27, 2008, the State Water Board posted on its website a Public Notice of Application for Water Quality Certification, which established a 21-day public comment period with respect to the EPA's application to the State Water Board for a 401 Certification with respect to its proposed Vessel General Permit. Persons participating in this public comment process, who should be readily identifiable to the State Water Board, may be interested in the subject matter of this Petition.

VIII. STATEMENT THAT THE PETITION HAS BEEN SENT TO THE EXECUTIVE DIRECTOR AND TO THE APPLICANT

A true and correct copy of this Petition for Reconsideration/Review was sent via overnight mail on January 15, 2009 to the following individuals:

State Water Board Representative

Dorothy Rice
Executive Director
State Water Resources Control Board
1001 I Street
Sacramento, CA 95814

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& COOPER LLP
ATTORNEYS AT LAW
1333 N. CALIFORNIA BLVD.
WALNUT CREEK, CA 94596

EPA (Applicant) Representative

Douglas E. Eberhardt
U.S. Environmental Protection Agency, Region 9
75 Hawthorne Street
San Francisco, CA 94105-3901

IX. COPY OF A REQUEST TO THE EXECUTIVE DIRECTOR FOR PREPARATION OF THE STATE WATER BOARD'S STAFF RECORD

A copy of correspondence transmitting the Petition for Reconsideration/Review to the Executive Director, which includes a request for preparation of the State Water Board's Staff Record, is attached hereto as Exhibit B.

X. SUMMARY OF THE MANNER IN WHICH AND TO WHAT EXTENT PETITIONER PARTICIPATED IN ANY PROCESS LEADING TO THE ACTION OR FAILURE TO ACT IN QUESTION

PMSA actively participated in the public comment process established by the EPA with respect to its development of the Vessel General Permit. On August 6, 2007, PMSA submitted comments in response to an EPA Notice published in the Federal Register on June 21, 2007. On August 1, 2008, PMSA submitted extensive comments on the EPA's proposed Vessel General Permit in response to a similar Federal Register Notice.

PMSA did not submit formal written comments in response to the State Water Board's Public Notice of Application for Water Quality Certification issued on August 27, 2008. However, a representative of PMSA was in periodic contact with appropriate State Water Board staff concerning the status of the preparation and proposed issuance of the 401 Certification requested by the EPA. PMSA was provided with a courtesy advance copy of a draft version of the 401 Certification very shortly before it was issued by the Executive Director as a final document. While PMSA did provide some very preliminary questions and comments on the draft 401 Certification, at that point the State Water Board was committed to the use of numerical effluent limitations for a wide range of constituents and the imposition of extensive sampling and monitoring requirements which are the focus of the instant Petition for Reconsideration/Review. PMSA does not believe that the State Water Board ever issued a draft version of the 401 Certification for formal public notice and comment prior to the Executive Director's issuance of

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1333 N. CALIFORNIA BLVD.
WALNUT CREEK, CA 94596

the document in final on December 17, 2008.

XI. REQUEST FOR STAY

Pursuant to 23 California Code of Regulations section 3869(d), PMSA hereby requests a stay of the Disputed Conditions while the instant Petition for Reconsideration/Review is pending before the State Water Board. Section 3869(d)(1) provides that a stay shall be granted if a petitioner is able to establish: (A) substantial harm to the petitioner or to the public interest if the stay is not granted; (B) lack of substantial harm to other interested persons and the public interest if a stay is granted, or the harm which would result form the stay being granted substantially outweighed by the harm which would occur if no stay is granted; and (C) substantial questions of fact and law regarding the disputed action. As set forth below and in the Declaration of John Berge, PMSA Vice President, which is attached hereto as Exhibit C, the requirements for issuance of a stay are met with respect to the Disputed Conditions.

A) SUBSTANTIAL HARM WILL OCCUR TO PETITIONER'S MEMBERS IF A STAY IS NOT GRANTED

Petitioner's members and other affected vessel owners and operators will suffer substantial harm if they are required to immediately comply with the Disputed Conditions. Among other things, there is no precedent for conducting the sampling and testing required by the State Water Board. Moreover, even if some of these requirements are found to be feasible, it will be impossible to accomplish the necessary tasks to safely implement such a sampling and testing program prior to February 6, 2009 – the date when the permit requirements become effective. Having not previously been subject to regulation under the NPDES program, most owners and operators of covered vessels are likely unsure which of their regulated discharges, if any, may contain constituents in excess of the numerical effluent limitations established by the State Water Board. For any effluent streams found to pose a compliance concern, vessel modifications, work practice revisions, or other measures will need to be implemented. Accordingly, all affected vessel owners/operators would necessarily be vulnerable to operating in non-compliance with provisions in the Vessel General Permit if the Disputed Conditions are allowed to become effective on February 6, 2009.

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B) **SUBSTANTIAL HARM WILL NOT OCCUR TO OTHER INTERESTED PARTIES AND THE PUBLIC INTEREST IF A STAY IS GRANTED**

Petitioner does not believe that a stay in implementing the Disputed Conditions until such time as the State Water Board can fully evaluate their legality, need and feasibility will present an immediate or substantial harm to public health, safety or the environment. This is a newly-regulated industry under the NPDES program, with the Disputed Conditions seemingly developed by the State Water Board without any meaningful evaluation of their benefits. Moreover, the granting of a stay will not impact the validity of the provisions in the Vessel General Permit as developed by the EPA or those conditions contained in the 401 Certification which are not subject to challenge in the instant Petition for Reconsideration/Review. In addition, vessel discharges of ballast water in California are already regulated by the State Lands Commission and the transportation of hazardous substances are fully regulated by the U.S. Coast Guard under Hazardous Materials Regulations found in 49 C.F.R. Part 176.

C) **SUBSTANTIAL QUESTIONS OF FACT AND LAW EXIST REGARDING THE DISPUTED CONDITIONS**

Petitioner believes there are extensive legal, technical and factual questions that must be resolved prior to implementing the type of sampling and testing program called for in the Disputed Conditions. Petitioner also disputes the legal basis for the State Water Board's imposition of numerical effluent limitations for such a broad array of constituents (especially with respect to discharge categories for which the EPA found calculation of such limitations to be impractical), and questions the scientific basis for the specific numerical limits developed for at least certain constituents. For example, the current conditions could require that samples be tested for well over 100 chemical and biological constituents without any technical basis for believing that many of those constituents could possibly be present in a discharge, much less posing a reasonable potential to contribute to a water quality exceedance. Additionally, it would appear that the numerical effluent limitations applicable to open ocean water discharges were taken directly from the California Ocean Plan (2005), which specifically exempts application to "vessel wastes." The term "waste" is defined broadly to include a "discharger's total discharge, of whatever origin."

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Accordingly, it would appear unreasonable for the State Water Board to have applied the California Ocean Plan's water quality objectives to vessel discharges without performing additional analysis.

DATED: January 15, 2009.

Respectfully submitted,

COOPER, WHITE & COOPER LLP

By: B. R. Ogilby

Barry R. Ogilby
Attorneys for Petitioner PACIFIC MERCHANT SHIPPING ASSOCIATION

COOPER, WHITE
& COOPER LLP
ATTORNEYS AT LAW
1333 N. CALIFORNIA BLVD.
WALNUT CREEK, CA 94596

EXHIBIT A

EXHIBIT A

Linda S. Adams
Secretary for
Environmental Protection

State Water Resources Control Board

Executive Office

Tam M. Doduc, Board Chair
1001 I Street • Sacramento, California 95814 • (916) 341-5615
Mailing Address: P.O. Box 100 • Sacramento, California • 95812-0100
Fax (916) 341-5621 • http://www.waterboards.ca.gov

Arnold Schwarzenegger
Governor

DEC 1 7 2008

Mr. Douglas E. Eberhardt
U.S. Environmental Protection Agency, Region 9
75 Hawthorne Street
San Francisco, CA 94105-3901

Dear Mr. Eberhardt:

CLEAN WATER ACT SECTION 401 WATER QUALITY CERTIFICATION FOR THE VESSEL GENERAL PERMIT

On June 17, 2008, the United States Environmental Protection Agency (USEPA) issued a proposed National Pollutant Discharge Elimination System (NPDES) Vessel General Permit for Discharges Incidental to the Normal Operation of Commercial Vessels and Large Recreational Vessels (VGP). On June 27, 2008, the State Water Resources Control Board (State Water Board) received a letter from USEPA requesting the issuance of a water quality certification pursuant to Clean Water Act (CWA) Section 401 for the general permit for discharges incidental to the normal operation of commercial and large recreational vessels. In response, on August 1, 2008, the State Water Board sent comments on the proposed VGP to USEPA Headquarters. That letter also stated that the State Water Board would deny the CWA Section 401 certification. On August 5, 2008, the State Water Board staff sent USEPA a letter denying the certification request without prejudice, primarily because the State Water Board must comply with the California Environmental Quality Act (CEQA) before it can issue a certification, and the compressed time schedule in USEPA's June 27, 2008 letter did not allow the State Water Board enough time to comply with CEQA.

In addition, staff participated in conference calls with USEPA to discuss the issues regarding the denial and to explore ways to proceed with the implementation of the VGP in California. During the conference call on August 14, 2008, USEPA informed staff that an extension could be requested, but current regulations could possibly be vacated on October 1, 2008, and vessels operating in California would not be covered by the VGP until CWA Section 401 certification is issued. Therefore, it was agreed that the State Water Board would send USEPA a request for an extension on the implementation of the proposed VGP in California. That request was sent on August 22, 2008. Staff also committed to taking an expedited approach in proceeding with the CWA Section 401 certification under a Class 8 categorical exemption from CEQA.

Furthermore, be advised that California disputes USEPA's authority to issue this permit, and thus lays claim to and retains the authority to directly regulate vessel discharges under the Clean Water Act in lieu of USEPA and in the future may issue its own NPDES general permit for vessel discharges. California also supports the States of Washington and Oregon in calling for USEPA to work with the States in establishing a West coast regional permit that will aid vessels that traverse through the different States' waters.

EXHIBIT A

Despite these legal concerns, we wish to support USEPA's attempt to alleviate the discharge of pollutants from vessels. Therefore, pursuant to Title 23, Section 3838 of the California Code of Regulations, I hereby make the certification determination described in Enclosure 1, based on the proposed VGP issued on June 17, 2008.

This certification is subject to the acquisition of all local, regional, state, and federal permits and approvals as required by law, including the consistency determinations of the California Coastal Commission and San Francisco Bay Conservation and Development Commission. The State Water Board concurs with these consistency determinations, which are transmitted for your reference as Enclosures 2 and 3, respectively.

If you require further assistance, please contact Darrin Polhemus, Deputy Director, Division of Water Quality at (916) 341-5458 (dpolhemus@waterboards.ca.gov), or Dominic Gregorio, Ocean Unit Chief at (916) 341-5488 (dgregorio@waterboards.ca.gov).

Sincerely,

for Tom Howard

Dorothy Rice
Executive Director

Enclosures

cc: Mr. Ryan Albert
U.S. Environmental Protection Agency
Headquarters, Ariel Rios Building
1200 Pennsylvania Avenue, N. W.
Mail Code: 4203M
Washington, DC 20460

State Water Board Members

Ms. Catherine Kuhlman, Executive Officer
North Coast Regional Water Quality Control Board
5550 Skylane Boulevard, Suite A
Santa Rosa, CA 95403

Mr. Bruce H. Wolfe, Executive Officer
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

cc: (See continuation page)

cc: (Continuation page)

Mr. Roger W. Briggs, Executive Officer
Central Coast Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA. 93401-7906

Ms. Tracy Egoscue, Executive Officer
Los Angeles Regional Water Quality Control Board
320 West Fourth Street, Suite 200
Los Angeles, CA 90013

Ms. Pamela Creedon, Executive Officer
Central Valley Regional Water Quality Control Board
Sacramento Office
11020 Sun Center Drive #200
Rancho Cordova, CA 95670-6114

Mr. Gerard J. Thibeault, Executive Officer
Santa Ana Regional Water Quality Control Board
3737 Main Street, Suite 500
Riverside, CA 92501-3339

Mr. John Robertus, Executive Officer
San Diego Regional Water Quality Control Board
9174 Sky Park Court, Suite 100
San Diego, CA 92123-4340

Ms. Maurya Faulkner
California State Lands Commission
Marine Facilities Division
100 Howe Avenue, Suite 100 South
Sacramento, CA 95825-8202

Linda S. Adams
Secretary for
Environmental Protection

State Water Resources Control Board

Executive Office

Tam M. Doduc, Board Chair
1001 I Street • Sacramento, California 95814 • (916) 341-5615
Mailing Address: P.O. Box 100 • Sacramento, California • 95812-0100
Fax (916) 341-5621 • http://www.waterboards.ca.gov

Arnold Schwarzenegger
Governor

ENCLOSURE 1

**ORDER FOR CLEAN WATER ACT SECTION 401
WATER QUALITY CERTIFICATION (CERTIFICATION)
FOR UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
VESSEL GENERAL PERMIT**

Project: Vessel General Permit (VGP) (Project)

Applicant: Douglas Eberhardt (Agent)
United States Environmental Protection Agency (USEPA)-Region 9 (applicant)
75 Hawthorne Street
San Francisco, CA 94105-3901

This Order responds to your request, received on June 27, 2008, on behalf of USEPA for a water quality certification for the subject project.

ACTION

	Order for Standard Certification		Order for Denial of Certification
X	Order for Technically Conditioned Certification		Order for Waiver of Waste Discharge Requirements

AUTHORIZATION:

This Certification conditionally certifies the VGP, based on the proposed VGP issued by USEPA on June 17, 2008 in Federal Register Volume 73, Number 117 that regulates the discharge of 28 vessel discharge streams by establishing effluent limitations including Best Management Practices (BMPs).

Table 1: Vessel Waste Discharges Eligible for Coverage Under the VGP

No.	Discharge	No.	Discharge
1	Deck Washdown and Runoff	15	Graywater
2	Bilgewater/Oily Water Separator Effluent	16	Motor Gasoline and Compensating Discharge
3	Ballast Water	17	Non-Oily Machinery Wastewater
4	Anti-Fouling Leachate From Anti-Fouling Hull Coatings/Hull Coating Leachate	18	Refrigeration and Air Condensate Discharge
5	Aqueous Film Forming Foam (AFFF)	19	Rudder Bearing Lubrication Discharge
6	Boiler/Economizer Blowdown	20	Seawater Cooling Overboard Discharge
7	Cathodic Protection	21	Seawater Piping Biofouling Discharge
8	Chain Locker Effluent	22	Small Boat Engine Wet Exhausts
9	Controllable Pitch Propeller Hydraulic Fluid	23	Sonar Dome Discharge
10	Distillation and Reverse Osmosis Brine	24	Stern Tube Oily Discharge
11	Elevator Pit Effluent	25	Underwater Ship Husbandry Discharge
12	Firemain Systems	26	Welldeck Discharges
13	Freshwater Layup	27	Graywater Mixed With Sewage
14	Gas Turbine Wash Water	28	Exhaust Gas Scrubber Washwater Discharge

For each discharge type, the permit establishes effluent limitations pertaining to the constituents found in the effluent. The permit also establishes BMPs designed to decrease the volume of constituents entering the waste stream. Even though a vessel may not produce all of these discharges, a vessel owner or operator is responsible for meeting the applicable effluent limitations and conditions for every listed waste type that the vessel discharges. The VGP includes effluent limitations to control a variety of pollutants, which have been classified into seven types:

Table 2: Types of Pollutants Regulated by the VGP

Pollutant Groups	Examples
Aquatic Nuisance Species (a.k.a., aquatic invasive species, or nonindigenous aquatic species)	Non-native Jellyfish, Zebra Mussels, Asian Clams, etc.
Most Conventional Pollutants	Biochemical Oxygen Demand, Oil and Grease, pH, Total Suspended Solids, etc.
Metals	Iron, Nickel, Zinc, Copper, Bronze, Silver, etc.
Nutrients	Phosphorous and Nitrogen
Pathogens	E. Coli and Fecal Coliform
Other Toxic Pollutants	Anti-foulants, rust inhibitors, epoxy coating materials, etc.
Non-Conventional Pollutants with Toxic Effects	Phthalates, Phenol, Tetrachloroethylene, Chlorine Residual, Chlorides, etc.

The VGP contains effluent limitations to control these pollutants which are potentially constituents of industrial waste, chemical waste, or garbage discharged from vessels.

The VGP also establishes technology-based requirements for certain discharges from eight specific classes of vessels, such as cruise ships, research vessels, and large ferries. Further, it provides water quality-based effluent limitations that incorporate requirements for impaired water bodies. Under the VGP, certain discharge types would be limited or prohibited in waters protected for conservation purposes (for example, national marine sanctuaries and national parks). The VGP also establishes specific corrective actions as well as inspections, monitoring record keeping, and reporting requirements. The VGP will cover vessel discharges into waters of the U.S. in all states and territories.

The VGP also requires submission of a Notice of Intent (NOI) for vessels that are 300 tons or greater or have a ballast water capacity of at least eight cubic meters. All other vessels covered by the VGP would not have to submit an NOI.

Based on a review of the project information submitted to date, State Water Resources Control Board (State Water Board) staff determined that this project is categorically exempt from California Environmental Quality Act review (California Code of Regulations, Title 14, section 15308 - Actions Taken by Regulatory Agencies for Protection of the Environment) and anticipated filing a Notice of Exemption for this project.

To comply with the public notice requirements of section 3858, Title 23, of the California Code of Regulations (CCR Title 23), which governs the State's Certification Program, a Public Notice of Application for Water Quality Certification for the subject project was posted on the State Water Board's Web site on August 27, 2008.

STANDARD CONDITIONS:

1. This Certification is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to section 13330 of the California Water Code and Article 6 (commencing with section 3867) of Chapter 28, CCR Title 23.

2. This Certification is not intended and shall not be construed to apply to any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent certification application was filed pursuant to subsection 3855(b) of Chapter 28, CCR Title 23, and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.

3. This Certification is conditioned upon total payment of any fee required under Chapter 28, CCR Title 23 and owed by the applicant.

ADDITIONAL CONDITIONS:

1. The VGP is only applicable to discharges incidental to the normal operation of non-military vessels engaged in transportation. Vessels in the U.S. Department of Transportation's Maritime Administration fleet, including but not limited to those located in Suisun Bay, do not qualify and must not be covered by the VGP. All vessels authorized under this permit that are less than 300 gross tons or have a capacity of less than eight cubic meters of ballast water that enter California waters must also submit an NOI to USEPA. USEPA must provide the State Water Board access to its database to get information on vessels that have submitted NOIs.

2. All discharges are prohibited in State Water Quality Protection Areas as defined in the Public Resources Code (PRC) and the California Ocean Plan (Ocean Plan).

3. Vessel discharges must be in accordance with the requirements of PRC section 72400 et seq. None of the 28 discharges covered by the VGP may contain hazardous waste as defined under California law, as well as hazardous substances listed in Attachment 2 of this document. The following other wastes are prohibited from discharge: sewage sludge, used or spent oil, garbage or trash (including plastic), photo-developing wastes, dry cleaning wastes, noxious liquid substance residues, and medical wastes. The vessel owner or operator must submit a certification stating that hazardous wastes as defined under California law, and prohibited wastes, will not be discharged.

4. Vessel discharges must comply with California State Lands Commission (SLC) requirements for ballast water discharges and hull fouling to control and prevent the introduction of nonindigenous species, found in PRC section 71200 et seq. and in the CCR sections 2270 through 2291, inclusive (See Attachment 3 of this document).

5. If the ballast water receives chlorination treatment, the discharge must not exceed a maximum level of 8 micrograms per liter of total residual chlorine.

6. Propeller cleaning is allowed until January 1, 2012, after which, propeller cleaning is allowed as specified in regulations adopted by SLC. All other in-water hull cleaning is prohibited unless conducted using the best available technologies economically feasible, as determined by both SLC and the State Water Board. This prohibition includes underwater ship husbandry discharges (Discharge #25).

7. Vessel discharges must comply with all statewide and regional water quality control plans (Basin Plans). Attachment 4 lists the narrative water quality objectives that must be met in the receiving water. Attachment 5 lists the numeric effluent limitations that must be met in the effluent discharged into the receiving water depending on the type of water body into which the discharge occurs.

8. Cruise ship graywater discharges are prohibited in State waters.[1] Graywater discharges from oceangoing vessels that weigh 300 gross tons or more are also prohibited if such vessels have sufficient holding capacity. All other oceangoing vessels (those that weigh 300 gross tons or more and do not have sufficient holding capacity and those that weigh less than 300 gross tons) must not exceed the effluent limitations in Attachment 5 when discharging graywater.

9. Any co-mingling of black water (sewage) and graywater waste streams will be considered graywater for purposes of these conditions, and must comply with Additional Condition 8 above.

10. Dye tabs shall be placed in graywater systems when ships are in port.

11. There must be no oily sheen from any discharge, and oil and grease must not exceed 15 milligrams per liter (mg/L) from any discharge.

12. Detergents must not be used to disperse hydrocarbon sheens in any waste streams. To ensure this practice is implemented for all state waters, and additionally to protect drinking water sources in the Sacramento and San Joaquin Delta, methylene blue active substances (MBAS) should not exceed 0.5 mg/L in all waterbodies.

13. Effluent monitoring must be performed on all waste streams discharged into State waters to determine waste stream quantity and quality. In the case of discharges that do not lend themselves to effluent sampling, such as antifouling hull coating leachate (Discharge #4), cathodic protection (Discharge #7), and sonar dome (Discharge #23), reporting according to Attachment 6, Additional Monitoring and Reporting Requirements, will suffice. For effluent that results from in-water maintenance near or below the water line, such as propeller hydraulic fluid (Discharge #9), rudder bearing lubrication (Discharge #19), and stern tube discharge (Discharge #24), receiving water sampling and analysis must be performed according to Attachment 6.

14. In addition to the other monitoring requirements, the volume of each discharge into State waters must be measured or estimated, and the constituents in Attachment 5 must be monitored according to the table in Attachment 6 when any discharge into State waters occurs. For discharges to enclosed bays, estuaries, and freshwater streams (defined in Attachment 5), except for polynuclear aromatic hydrocarbons (PAHs) and solvents (benzene, toluene, ethylbenzene, and xylene), the vessel owner or operator may submit to USEPA and the State Water Board a certification stating that the discharge does not contain specific volatile and semi-volatile organic constituents in lieu of monitoring for those constituents. For samples collected when a discharge occurs while a vessel is underway in State waters, the sample may be held until the vessel arrives at its next port at which time the sample shall be analyzed and the appropriate reports submitted to USEPA and the State Water Board or SLC as shown in Additional Condition 16 below. When in a California port

[1] "State waters" extend three nautical miles into the Pacific Ocean. State water quality authority applies to any discharges or threats of discharges into such waters or outside the boundaries of the state that could affect the quality of state waters. (Cal. Const., art. III, § 2; Gov. Code, § 160 et seq.; Wat. Code, § 13260, subd. (a)(2).)

or ocean terminal, samples must be analyzed by, or sent for analysis to, a certified laboratory as soon as possible.

15. When the manifest for vessel cargo indicates the presence of any hazardous substances as set forth in Title 22, Chapter 11, Appendix X of the California Code of Regulations, the discharges must also be monitored for those specific substances (see Attachment 2).

16. All monitoring and reporting information shall be submitted to USEPA. Vessels entering the State of California shall also submit reports using the following forms:

    - **7.1 – State Water Board Discharge Type Reporting Form**

    - **7.2 – State Water Board Constituent Type Reporting Form**
      Submit annually or whenever a report is submitted to USEPA.

      Attention: NPDES Unit
      Division of Water Quality
      State Water Resources Control Board
      1001 "I" Street, 15th Floor
      Sacramento, CA 95814

    - **7.3 – SLC Marine Invasive Species Program Hull Husbandry Reporting Form**
      Submit annually within 60 days of receiving a written or electronic request from the California State Lands Commission.

    - **7.4 – SLC Ballast Water Reporting Form**
      Upon departure from each port or place in California waters.

      California State Lands Commission
      Marine Facilities Division
      200 Oceangate, Suite 900
      Long Beach, CA 90802

17. This Certification includes Attachments 1-7. Following is a description of these attachments:
    - Attachment 1 – Signatory Requirements;
    - Attachment 2 – List of Chemical Names and Common Names for Hazardous Wastes and Hazardous Materials, Title 22, Chapter 11, Appendix X, California Code of Regulations
    - Attachment 3 – California State Lands Commission's Ballast Water Performance Standards;
    - Attachment 4 – Narrative Discharge Objectives in the California Ocean Plan and Basin Plans;
    - Attachment 5 – Numeric Effluent Limitations;
    - Attachment 6 – Sampling and Monitoring Requirements; and
    - Attachment 7 – Vessel Discharge Reporting Forms.

ADMINISTRATIVE CONDITIONS:

1. This Certification shall expire five (5) years from the date of issuance.

2. The State Water Board reserves the right to suspend, cancel, or modify and reissue this Certification, after providing notice to USEPA, if the State Water Board determines that the project fails to comply with any of the terms or conditions of this Certification.

3. This Water Quality Certification is subject to the acquisition of all local, regional, state, and federal permits and approvals as required by law. Failure to meet any conditions contained herein or any the conditions contained in any other permit or approval issued by the State of California or any subdivision thereof may result in the revocation of this Certification.

4. USEPA shall notify the State Water Board within 24 hours of any noncompliance that may impact the beneficial uses of waters of the State. The notification shall include the volume and type of materials discharged and recovered, measures used to stop and contain the discharge, and measures implemented to prevent future discharges.

5. In the event of any violation or threatened violation of the conditions of this Certification, the violation or threatened violation must be subject to any remedies, penalties, processes, or sanctions as provided for under State law.

STATE WATER BOARD CONTACT PERSON:

If you have any questions or comments, please contact Darrin Polhemus, Deputy Director of our Division of Water Quality, at (916) 341-5458 (dpolhemus@waterboards.ca.gov) or Dominic Gregorio, Chief of our Ocean Unit, at (916) 341-5488 (dgregorio@waterboards.ca.gov).

WATER QUALITY CERTIFICATION:

I hereby issue an order certifying that discharges as described in the VGP comply with the applicable provisions of Clean Water Act sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance), and 307 (Toxic and Pretreatment Effluent Standards) if all of the conditions listed in this Certification are met. These discharges are also regulated pursuant to State Water Board Water Quality Order No. 2003-0017-DWQ, which authorizes this Certification to serve as Waste Discharge Requirements pursuant to the California Water Code section 13000 et seq.

Except insofar as may be modified by any preceding conditions, all Certification actions are contingent on (a) the discharge being limited and all proposed mitigation being completed in strict compliance with the VGP, and (b) compliance with all applicable requirements of Statewide Water Quality Control Plans and the Regional Water Quality Control Board Water Quality Control Plans.

Tom Howard for DR — 12/17/08

Dorothy Rice, Executive Director
State Water Resources Control Board

Attachment 1

Signatory Requirements

All Documents Submitted In Compliance With This Order Shall Meet The Following Signatory Requirements:

1. All applications, reports, or information submitted to the State Water Resources Control Board (State Water Board) must be signed and certified as follows:

   (a) For a corporation, by a responsible corporate officer of at least the level of vice-president.
   (b) For a partnership or sole proprietorship, by a general partner or proprietor, respectively.
   (c) For a municipality, or a state, federal, or other public agency, by either a principal executive officer or ranking elected official.

2. Alternatively, for a vessel operating in waters of the State, all applications, reports, or information submitted to the State Water Board may be signed and certified by a duly authorized representative of a person designated in Items 1.a through 1.c, such as the master, operator, agent, or other person in charge if:

   (a) The authorization is made in writing by a person described in Items 1.a through 1.c above.
   (b) The authorization specifies either an individual or position having responsibility for the overall operation of the regulated activity.
   (c) The written authorization is submitted to the State Water Board's Executive Director:

   Attention: NPDES Unit
   Division of Water Quality
   State Water Resources Control Board
   1001 "I" Street, 15th Floor
   Sacramento, CA 95814

3. Any person signing a document under this section shall make the following certification:

   "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

Attachment 2

List of Chemical Names and Common Names for Hazardous Wastes and Hazardous Materials

Title 22, Chapter 11, Appendix X, California Code of Regulations

(a) This Attachment sets forth a list of chemicals which create a presumption that a waste is a hazardous waste. If a waste consists of or contains a chemical listed in this Attachment, the waste is presumed to be a hazardous waste unless it is determined that the waste is not a hazardous waste pursuant to the procedures set forth in section 66262.11 of Title 22 of the California Code of Regulations (CCR Title 22). The hazardous characteristics which serve as a basis for listing the chemicals are indicated in the list as follows: (X) toxic, (C) corrosive, (I) ignitable, and (R) reactive. A chemical denoted with an asterisk (*) is presumed to be an extremely hazardous waste unless it does not exhibit any of the criteria set forth in section 66261.110 and section 66261.113 of CCR Title 22. Trademark chemical names are indicated by all capital letters. The list can be found at: http://www.dtsc.ca.gov/LawsRegsPolicies/Title22/upload/Ch-11-Appendix-X.pdf

(b) This Attachment sets forth a list of common names of wastes which are presumed to be hazardous wastes unless it is determined that the waste is not a hazardous waste pursuant to the procedures set forth in section 66262.11 of CCR Title22. The hazardous characteristics which serve as a basis for listing the common names of wastes are indicated in the list as follows: (X) toxic, (C) corrosive, (I) ignitable, and (R) reactive.

Acetylene sludge (C)	Drilling mud (X)
Acid and water (C)	Dyes (X)
Acid sludge (C)	Etching acid liquid or solvent (C,I)
AFU Floc (X)	Fly ash (X,C)
Alkaline caustic liquids (C)	Fuel waste (X,I)
Alkaline cleaner (C)	Insecticides (X)
Alkaline corrosive battery fluid (C)	Laboratory waste (X,C,R,I)
Alkaline corrosive liquids (C)	Lime and sulfur sludge (C)
Asbestos waste (X)	Lime and water (C)
Ashes (X,C)	Lime sludge (C)
Bag house wastes (X)	Lime wastewater (C)
Battery acid (C)	Liquid cement (I)
Beryllium waste (X)	Mine tailings (X,R)
Bilge water (X)	Obsolete explosives (R)
Boiler cleaning waste (X,C)	Oil and water (X)
Bunker Oil (X,I)	Oil Ash (X,C)
Catalyst (X,I,C)	Paint (or varnish) remover or stripper (I)
Caustic sludge (C)	Paint thinner (X,I)
Caustic wastewater (C)	Paint waste (or slops) (X,I)
Cleaning solvents (I)	Pickling liquor (C)
Corrosion inhibitor (X,C)	Pigments (X)

Attachment 2
List of Hazardous Materials
Title 22, Chapter 11, Appendix X, California Code of Regulations

Data processing fluid (I)	Stripping solution (X,I)
Drilling fluids (X,C)	Sulfonation oil (I)
Retrograde explosives (R)	Tank bottom sediment (X)
Sludge acid (C)	Plating waste (X,C)
Soda ash (C)	Printing Ink (X)
Solvents (I)	Tanning sludges (X)
Spent acid (C)	Toxic chemical toilet wastes (X)
Spent caustic (C)	Unrinsed pesticide containers (X)
Spent (or waste) cyanide solutions (X,C)	Unwanted or waste pesticides --an unusable portion of active ingredient or undiluted formulation (X)
Spent mixed acid (C)	Waste epoxides (X,I)
Spent plating solution (X,C)	Waste (or slop) oil (X)
Spent sulfuric acid (C)	Weed Killer (X)

(c) This Attachment sets forth a list of electronic wastes that are presumed to be hazardous wastes unless it is determined that the electronic waste is not a hazardous waste pursuant to the procedures set forth in section 66262.11 of CCR Title 22. The hazardous characteristics that serve as a basis for listing the common names of electronic wastes are indicated in the list as follows: (X) toxic, (C) corrosive, (I) ignitable, and (R) reactive. For purposes of Health and Safety Code section 25214.10.1, devices marked with a pound symbol (#) were listed herein on or before July 1, 2004. Notwithstanding section 66260.202 of CCR Title 22, subsections (a) and (b), the prohibition described in subsection (a) of section 66260.202 shall not be applied to devices in this list marked with a delta symbol (Δ) until July 1 of the year subsequent to the year in which the devices were added to the list, as specified in parentheses below, and then it shall apply only to those devices that are manufactured on or after that July 1 date:

Cathode ray tube containing devices (CRT devices) with CRTs greater than four inches measured diagonally (X)
Cathode ray tubes (CRTs) greater than four inches measured diagonally (X);
Computer monitors containing cathode ray tubes greater than four inches measured diagonally (X)
Laptop computers with liquid crystal display (LCD) screens greater than four inches measured diagonally (X)
LCD containing desktop monitors greater than four inches measured diagonally (X)
Televisions containing cathode ray tubes greater than four inches measured diagonally (X)
Televisions containing liquid crystal display (LCD) screens greater than four inches measured diagonally (X) (added December 2004)
Plasma televisions with screens greater than four inches measured diagonally (X) (added December 2004)
Δ Portable DVD players with liquid crystal display (LCD) screens greater than four inches measured diagonally (X) (added December 2006)

Attachment 3

California State Lands Commission's Ballast Water Performance Standards

Organism Size Class	Performance Standards[1,2]
Organisms greater than 50 µm[3] in minimum dimension	No detectable living organisms
Organisms 10 – 50 µm in minimum dimension	< 0.01 living organisms per ml[4]
Living organisms less than 10 µm[3] in minimum dimension	< 10^3 bacteria/100 ml < 10^4 viruses/100 ml
Escherichia coli	< 126 CFU[5]/100 ml
Intestinal enterococci	< 33 CFU/100 ml
Toxicogenic *Vibrio cholerae* (01 & 0139)	< 1 CFU/100 ml or < 1 CFU/gram wet weight zoological samples

[1] See Implementation Schedule below for dates by which vessels must meet California Interim Performance Standards.
[2] The final discharge standard for California, beginning January 1, 2020, is zero detectable living organisms for all organism size classes.
[3] Micrometer
[4] Milliliter
[5] Colony-forming unit

Performance Standards Implementation Schedule

Ballast Water Capacity of Vessel	Standards apply to new vessels in this size class constructed on or after	Standards apply to all other vessels in this size class beginning in
< 1500 metric tons	2010	2016
1500 – 5000 metric tons	2010	2014
> 5000 metric tons	2012	2016

Attachment 4

Narrative Discharge Objectives in the California Ocean Plan and Basin Plans

1. The discharge shall be free of floating materials that would be visible in the receiving water.
2. The discharge must not cause oil and grease to be visible in the receiving water (no visible sheen).
3. The discharge must not cause aesthetically undesirable discoloration of the surface of the receiving water.
4. Natural light shall not be significantly reduced in the receiving water as the result of the discharge.
5. The discharge must not contain inert solids and other settleable materials or organic substances that will degrade benthic communities.
6. The discharge must not contain toxic substances in toxic concentrations, and substances that could accumulate to toxic levels in the receiving water or sediments.
7. The discharge must not contain substances that bioaccumulate, in fish, shellfish, or other marine/aquatic life used for human consumption, to levels that are harmful to human health.
8. The discharge must not contain substances that alter the taste, odor, or color of fish, shellfish, or other marine/aquatic life used for human consumption.
9. The discharge must not contain radioactive wastes or byproducts.
10. The discharge must not contain nutrient concentrations that would cause objectionable aquatic growths or degrade indigenous biota in the receiving water.
11. The discharge must not cause dissolved oxygen concentrations in the receiving water to be depressed more than 10 percent from that which occurs naturally, as the result of the discharge of oxygen demanding wastes.
12. The discharge must not cause pH in the ocean receiving water to be changed more than 0.2 unit from that which occurs naturally.
13. The discharge must not cause pH in freshwater receiving water (Sacramento and San Joaquin Rivers) to be changed more than 0.5 unit from that which occurs naturally.
14. The discharge must not cause dissolved sulfide concentrations in the receiving water to be increased above that present under natural conditions.

Attachment 5

Numeric Effluent Limitations

Because of the episodic nature of ballast water and all other 27 vessel discharges, many of the limitations in the following tables are based on the Ocean Plan instantaneous maximums, daily maximums, or 30-day averages, and the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California relevant to specific constituents implementing the California Toxics Rule (Code of Federal Regulations [CFR], Title 40, § 131.38) and Basin Plan objectives. The instantaneous maximums limitations will apply only if monitoring is conducted on a continuous basis. The daily maximums and 30-day averages in the Ocean Plan will apply as daily maximum limits when monitoring is based on single grab samples. The oil and grease limit is the same for the United States Coast Guard and International Convention for the Prevention of Pollution from Ships (better known as MARPOL). The tables below are separated for discharges to: (1) all water bodies, (2) the ocean, and (3) for discharges to all inland waters including enclosed bays, estuaries, and freshwater streams. Enclosed bays include San Francisco Bay, Los Angeles/Long Beach Harbors, Mission Bay, and San Diego Bay. Estuaries include the Sacramento and San Joaquin River Delta, Suisun Bay, and Carquinez Strait down to Carquinez Bridge. Freshwater streams include the San Joaquin and Sacramento Rivers.

Water Quality-Based Effluent Limitations, All Water Bodies

CHEMICAL CONSTITUENTS					
Constituent	**Units**	**Basis**	**Limit (Daily Maximum)**	**Limit (Single Sample)**	**Analytical Method [1]**
Oil and Grease	mg/l	Best Professional Judgment (BPJ)	15	15	USEPA 1664
TOXICITY CONSTITUENTS					
Acute toxicity	TUa	Aquatic Life	0.3	0.3	See tables in Attachment 6
Chronic toxicity	TUc	Aquatic Life	1.0	1.0	See tables in Attachment 6

INDICATOR BACTERIA CONSTITUENTS					
Constituent	**Units**	**Basis**	**Limit (30 day Geo Mean)**	**Limit (Single Sample)**	**Analytical Method [1]**
Total Coliform Bacteria	MPN or CFU	Water Contact Recreation	1,000/100ml	10,000/100ml	40 CFR 136 Table 1A
Fecal Coliform Bacteria[1]	MPN or	Water Contact Recreation	200/100ml	400/100ml	40 CFR 136 Table 1A

Attachment 5
Numeric Effluent Limitations

INDICATOR BACTERIA CONSTITUENTS					
Constituent	**Units**	**Basis**	**Limit (30 day Geo Mean)**	**Limit (Single Sample)**	**Analytical Method [1]**
	CFU				
E. coli in ballast water after January 1, 2010[2]	MPN or CFU	SLC nonindigenous species	-----	126/100ml	40 CFR 136 Table 1A (EPA Method 1603) or Standard Method 9222.G (1998, 20th Ed.)
Enterococcus Bacteria	MPN or CFU	Water Contact Recreation	35/100ml	104/100ml	40 CFR 136 Table 1A
Enterococcus Bacteria in ballast water after Jan.1, 2010[2]	MPN or CFU	SLC nonindigenous species	-------	33/100ml	40 CFR 136 Table 1A (EPA Method 1600) or Standard Method 9230.C (1998, 20th Ed.)

1. E. coli may be substituted for Fecal Coliform.
2. Applies only to new vessels capable of carrying less than 5000 MT of ballast water beginning on January 1, 2010, and new vessels capable of carrying more than 5000 MT of ballast water beginning on January 1, 2012.

Water Quality-Based Effluent Limitations for Ocean Discharges

CHEMICAL CONSTITUENTS					
Constituent	**Units**	**Basis**	**Limit (Daily Maximum or where noted 30 day average)**	**Limit (Instantaneous Maximum)**	**Analytical Method**
Arsenic	µg/l	Marine Aquatic Life	32	80	USEPA 1640 for Seawater or EPA 200-12, or EPA 6020/200.8
Cadmium	µg/l	Marine Aquatic Life	4	10	USEPA 1640 for Seawater or EPA 6020/200.8
Chromium VI[1]	µg/l	Marine Aquatic Life	8	20	USEPA 218.4 or EPA 6020/200.8
Copper	µg/l	Marine Aquatic Life	12	30	USEPA 1640 for Seawater or EPA 6020/200.8

Attachment 5
Numeric Effluent Limitations

CHEMICAL CONSTITUENTS					
Constituent	**Units**	**Basis**	**Limit (Daily Maximum or where noted 30 day average)**	**Limit (Instantaneous Maximum)**	**Analytical Method**
Lead	µg/l	Marine Aquatic Life	8	20	USEPA 1640 for Seawater or EPA 6020/200.8
Mercury	µg/l	Marine Aquatic Life	0.16	0.4	USEPA 245.7
Nickel	µg/l	Marine Aquatic Life	20	50	USEPA 1640 for Seawater or EPA 6020/200.8
Selenium	µg/l	Marine Aquatic Life	60	150	USEPA 200-12 or EPA 6020/200.8
Silver	µg/l	Marine Aquatic Life	2.8	7	USEPA 1640 for Seawater or EPA 6020/200.8
Zinc	µg/l	Marine Aquatic Life	80	200	USEPA 1640 for Seawater or EPA 6020/200.8
Cyanide	µg/l	Marine Aquatic Life	4	10	Std Method 4500CN or EPA 6020/200.8
Ammonia N	µg/l	Marine Aquatic Life	2,400	6,000	Std Method 4500-NH3-D or EPA 350.1 (Rev 2.0) or EPA 6020/200.8
Total Chlorine Residual[2]	µg/l	Marine Aquatic Life	8	60	Std Method 4500-Cl-E or EPA 6020/200.8
Phenolic Compounds (non-chlorinated)	µg/l	Marine Aquatic Life	120	300	Std Methods 6240 or USEPA 8270C or EPA 6020/200.8
Chlorinated Phenolics	µg/l	Marine Aquatic Life	4	10	Std Methods 6240 or USEPA 8270C or EPA 6020/200.8
Endosulfan	µg/l	Marine Aquatic Life	0.018	0.027	USEPA 8080 or EPA 6020/200.8
Endrin	µg/l	Marine Aquatic Life	0.004	0.006	USEPA 8080 or EPA 6020/200.8
Hexachloro-cyclohexane	µg/l	Marine Aquatic Life	0.008	0.012	USEPA 8080 or EPA 6020/200.8
Halomethanes	µg/l	Human Health – seafood	130 [4]	-------	USEPA 8010 or 8260B or EPA

Attachment 5
Numeric Effluent Limitations

CHEMICAL CONSTITUENTS					
Constituent	**Units**	**Basis**	**Limit (Daily Maximum or where noted 30 day average)**	**Limit (Instantaneous Maximum)**	**Analytical Method**
		consumption			6020/200.8
Tributyltin	µg/l	Human Health – seafood consumption	0.0014 [4]	--------	Std Method 6710 or EPA 6020/200.8
PAHs	µg/l	Human Health – seafood consumption	0.0088 [4]	-------	Individual PAHs from USEPA 625 or EPA 6020/200.8
Tetrachloro-ethylene	µg/l	Human Health – seafood consumption	2.0 [4]	-------	USEPA 8260 or EPA 6020/200.8
pH	pH units	COP[3] Table A effluent limits	6-9	6-9	USEPA 150.2 or Std Method 4500-H^+-B or EPA 6020/200.8

PHYSICAL CONSTITUENTS					
Constituent	**Units**	**Basis**	**Limit (Daily Maximum)**	**Limit (Instantaneous Maximum)**	**Analytical Method**
Turbidity	NTU	COP[4] Table A effluent limits	-----	225	USEPA 180.1 or Standard Method 2130 B
Suspended solids	mg/l	COP[4] Table A effluent limits	-----	60	Std Method 2540-D
Settleable Solids	ml/l	COP[4] Table A effluent limits	-----	3	Std Method 2540-F

1. For Hexavalent Chromium (Cr VI), total Chromium analyses can be used, but results must still meet the limitation. For total chromium, use EPA method 200-12.
2. For waters exceeding 1000 mg/L dissolved solids must use either a matrix removal sample preparation step, or a matrix reduction process.
3. Both total residual chlorine and chlorine produced oxidants, refer to the sum of free and combined chlorine and bromine as measured by the methods for total residual chlorine. The term "chlorine produced oxidants" is sometimes used in seawater samples because of the many oxidative reactions that chlorine can undergo in salt water.
4. COP – California Ocean Plan
5. For human health objectives in the COP, the limits are in terms of 30-day averages. When only one sample is collected, that limit applies to that sample.